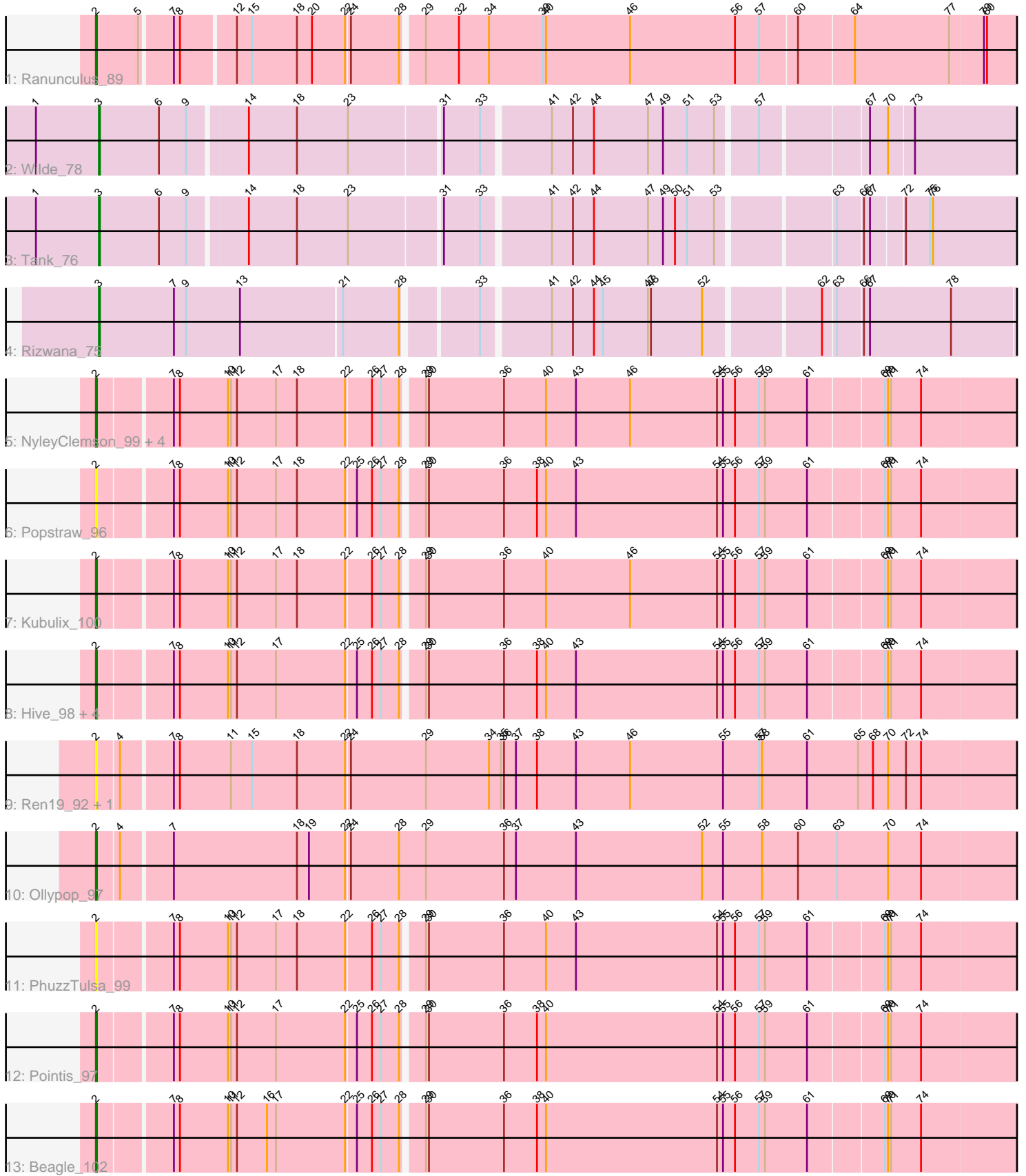


Pham 309256



Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 309256 Report

This analysis was run 06/27/26 on database version 652.

Pham number 309256 has 22 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Ranunculus_89
- Track 2 : Wilde_78
- Track 3 : Tank_76
- Track 4 : Rizwana_75
- Track 5 : NyleyClemson_99, Forrestell_99, RazzB_99, MellowYellow_101, RIPWilbur_99
- Track 6 : Popstraw_96
- Track 7 : Kubulix_100
- Track 8 : Hive_98, DogYard_100, Odyssey395_100, Pureglobe5_100, BetaFish_100
- Track 9 : Ren19_92, Nikan_97
- Track 10 : Ollypop_97
- Track 11 : PhuzzTulsa_99
- Track 12 : Pointis_97
- Track 13 : Beagle_102

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 2, it was called in 13 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Beagle_102, BetaFish_100, DogYard_100, Forrestell_99, Hive_98, Kubulix_100, MellowYellow_101, Nikan_97, NyleyClemson_99, Odyssey395_100, Ollypop_97, PhuzzTulsa_99, Pointis_97, Popstraw_96, Pureglobe5_100, RIPWilbur_99, Ranunculus_89, RazzB_99, Ren19_92,

Genes that have the "Most Annotated" start but do not call it:

-

Genes that do not have the "Most Annotated" start:

- Rizwana_75, Tank_76, Wilde_78,

Summary by start number:

Start 2:

- Found in 19 of 22 (86.4%) of genes in pham
- Manual Annotations of this start: 13 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beagle_102 (AP2), BetaFish_100 (AP2), DogYard_100 (AP2), Forrestell_99 (AP2), Hive_98 (AP2), Kubulix_100 (AP2), MellowYellow_101 (AP2), Nikan_97 (AP2), NyleyClemson_99 (AP2), Odyssey395_100 (AP2), Ollypop_97 (AP2), PhuzzTulsa_99 (AP2), Pointis_97 (AP2), Popstraw_96 (AP2), Pureglobe5_100 (AP2), RIPWilbur_99 (AP2), Ranunculus_89 (AP), RazzB_99 (AP2), Ren19_92 (AP2),

Start 3:

- Found in 3 of 22 (13.6%) of genes in pham
- Manual Annotations of this start: 3 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rizwana_75 (AP1), Tank_76 (AP1), Wilde_78 (AP1),

Summary by clusters:

There are 3 clusters represented in this pham: AP2, AP, AP1,

Info for manual annotations of cluster AP:

- Start number 2 was manually annotated 1 time for cluster AP.

Info for manual annotations of cluster AP1:

- Start number 3 was manually annotated 3 times for cluster AP1.

Info for manual annotations of cluster AP2:

- Start number 2 was manually annotated 12 times for cluster AP2.

Gene Information:

Gene: Beagle_102 Start: 60913, Stop: 60002, Start Num: 2

Candidate Starts for Beagle_102:

(Start: 2 @60913 has 13 MA's), (7, 60844), (8, 60838), (10, 60790), (11, 60787), (12, 60781), (16, 60751), (17, 60742), (22, 60673), (25, 60664), (26, 60649), (27, 60640), (28, 60622), (29, 60604), (30, 60601), (36, 60526), (38, 60493), (40, 60484), (54, 60313), (55, 60307), (56, 60295), (57, 60271), (59, 60265), (61, 60223), (69, 60151), (70, 60148), (71, 60145), (74, 60115),

Gene: BetaFish_100 Start: 61128, Stop: 60217, Start Num: 2

Candidate Starts for BetaFish_100:

(Start: 2 @61128 has 13 MA's), (7, 61059), (8, 61053), (10, 61005), (11, 61002), (12, 60996), (17, 60957), (22, 60888), (25, 60879), (26, 60864), (27, 60855), (28, 60837), (29, 60819), (30, 60816), (36, 60741), (38, 60708), (40, 60699), (43, 60669), (54, 60528), (55, 60522), (56, 60510), (57, 60486), (59, 60480), (61, 60438), (69, 60366), (70, 60363), (71, 60360), (74, 60330),

Gene: DogYard_100 Start: 60621, Stop: 59710, Start Num: 2

Candidate Starts for DogYard_100:

(Start: 2 @60621 has 13 MA's), (7, 60552), (8, 60546), (10, 60498), (11, 60495), (12, 60489), (17, 60450), (22, 60381), (25, 60372), (26, 60357), (27, 60348), (28, 60330), (29, 60312), (30, 60309), (36, 60234), (38, 60201), (40, 60192), (43, 60162), (54, 60021), (55, 60015), (56, 60003), (57, 59979), (59, 59973), (61, 59931), (69, 59859), (70, 59856), (71, 59853), (74, 59823),

Gene: Forrestell_99 Start: 59329, Stop: 58418, Start Num: 2

Candidate Starts for Forrestell_99:

(Start: 2 @59329 has 13 MA's), (7, 59260), (8, 59254), (10, 59206), (11, 59203), (12, 59197), (17, 59158), (18, 59137), (22, 59089), (26, 59065), (27, 59056), (28, 59038), (29, 59020), (30, 59017), (36, 58942), (40, 58900), (43, 58870), (46, 58816), (54, 58729), (55, 58723), (56, 58711), (57, 58687), (59, 58681), (61, 58639), (69, 58567), (70, 58564), (71, 58561), (74, 58531),

Gene: Hive_98 Start: 60603, Stop: 59692, Start Num: 2

Candidate Starts for Hive_98:

(Start: 2 @60603 has 13 MA's), (7, 60534), (8, 60528), (10, 60480), (11, 60477), (12, 60471), (17, 60432), (22, 60363), (25, 60354), (26, 60339), (27, 60330), (28, 60312), (29, 60294), (30, 60291), (36, 60216), (38, 60183), (40, 60174), (43, 60144), (54, 60003), (55, 59997), (56, 59985), (57, 59961), (59, 59955), (61, 59913), (69, 59841), (70, 59838), (71, 59835), (74, 59805),

Gene: Kubulix_100 Start: 60288, Stop: 59377, Start Num: 2

Candidate Starts for Kubulix_100:

(Start: 2 @60288 has 13 MA's), (7, 60219), (8, 60213), (10, 60165), (11, 60162), (12, 60156), (17, 60117), (18, 60096), (22, 60048), (26, 60024), (27, 60015), (28, 59997), (29, 59979), (30, 59976), (36, 59901), (40, 59859), (46, 59775), (54, 59688), (55, 59682), (56, 59670), (57, 59646), (59, 59640), (61, 59598), (69, 59526), (70, 59523), (71, 59520), (74, 59490),

Gene: MellowYellow_101 Start: 60531, Stop: 59620, Start Num: 2

Candidate Starts for MellowYellow_101:

(Start: 2 @60531 has 13 MA's), (7, 60462), (8, 60456), (10, 60408), (11, 60405), (12, 60399), (17, 60360), (18, 60339), (22, 60291), (26, 60267), (27, 60258), (28, 60240), (29, 60222), (30, 60219), (36, 60144), (40, 60102), (43, 60072), (46, 60018), (54, 59931), (55, 59925), (56, 59913), (57, 59889), (59, 59883), (61, 59841), (69, 59769), (70, 59766), (71, 59763), (74, 59733),

Gene: Nikan_97 Start: 60331, Stop: 59405, Start Num: 2

Candidate Starts for Nikan_97:

(Start: 2 @60331 has 13 MA's), (4, 60310), (7, 60262), (8, 60256), (11, 60205), (15, 60184), (18, 60139), (22, 60091), (24, 60088), (29, 60013), (34, 59950), (35, 59938), (36, 59935), (37, 59923), (38, 59902), (43, 59863), (46, 59809), (55, 59716), (57, 59680), (58, 59677), (61, 59632), (65, 59581), (68, 59566), (70, 59551), (72, 59533), (74, 59518),

Gene: NyleyClemson_99 Start: 60161, Stop: 59250, Start Num: 2

Candidate Starts for NyleyClemson_99:

(Start: 2 @60161 has 13 MA's), (7, 60092), (8, 60086), (10, 60038), (11, 60035), (12, 60029), (17, 59990), (18, 59969), (22, 59921), (26, 59897), (27, 59888), (28, 59870), (29, 59852), (30, 59849), (36, 59774), (40, 59732), (43, 59702), (46, 59648), (54, 59561), (55, 59555), (56, 59543), (57, 59519), (59, 59513), (61, 59471), (69, 59399), (70, 59396), (71, 59393), (74, 59363),

Gene: Odyssey395_100 Start: 60311, Stop: 59400, Start Num: 2

Candidate Starts for Odyssey395_100:

(Start: 2 @60311 has 13 MA's), (7, 60242), (8, 60236), (10, 60188), (11, 60185), (12, 60179), (17, 60140), (22, 60071), (25, 60062), (26, 60047), (27, 60038), (28, 60020), (29, 60002), (30, 59999), (36, 59924), (38, 59891), (40, 59882), (43, 59852), (54, 59711), (55, 59705), (56, 59693), (57, 59669), (59, 59663), (61, 59621), (69, 59549), (70, 59546), (71, 59543), (74, 59513),

Gene: Ollypop_97 Start: 61675, Stop: 60749, Start Num: 2

Candidate Starts for Ollypop_97:

(Start: 2 @61675 has 13 MA's), (4, 61654), (7, 61606), (18, 61483), (19, 61471), (22, 61435), (24, 61432), (28, 61384), (29, 61357), (36, 61279), (37, 61267), (43, 61207), (52, 61081), (55, 61060), (58, 61021), (60, 60985), (63, 60946), (70, 60895), (74, 60862),

Gene: PhuzzTulsa_99 Start: 60759, Stop: 59848, Start Num: 2

Candidate Starts for PhuzzTulsa_99:

(Start: 2 @60759 has 13 MA's), (7, 60690), (8, 60684), (10, 60636), (11, 60633), (12, 60627), (17, 60588), (18, 60567), (22, 60519), (26, 60495), (27, 60486), (28, 60468), (29, 60450), (30, 60447), (36, 60372), (40, 60330), (43, 60300), (54, 60159), (55, 60153), (56, 60141), (57, 60117), (59, 60111), (61, 60069), (69, 59997), (70, 59994), (71, 59991), (74, 59961),

Gene: Pointis_97 Start: 60204, Stop: 59293, Start Num: 2

Candidate Starts for Pointis_97:

(Start: 2 @60204 has 13 MA's), (7, 60135), (8, 60129), (10, 60081), (11, 60078), (12, 60072), (17, 60033), (22, 59964), (25, 59955), (26, 59940), (27, 59931), (28, 59913), (29, 59895), (30, 59892), (36, 59817), (38, 59784), (40, 59775), (54, 59604), (55, 59598), (56, 59586), (57, 59562), (59, 59556), (61, 59514), (69, 59442), (70, 59439), (71, 59436), (74, 59406),

Gene: Popstraw_96 Start: 60380, Stop: 59469, Start Num: 2

Candidate Starts for Popstraw_96:

(Start: 2 @60380 has 13 MA's), (7, 60311), (8, 60305), (10, 60257), (11, 60254), (12, 60248), (17, 60209), (18, 60188), (22, 60140), (25, 60131), (26, 60116), (27, 60107), (28, 60089), (29, 60071), (30, 60068), (36, 59993), (38, 59960), (40, 59951), (43, 59921), (54, 59780), (55, 59774), (56, 59762), (57, 59738), (59, 59732), (61, 59690), (69, 59618), (70, 59615), (71, 59612), (74, 59582),

Gene: Pureglobe5_100 Start: 60869, Stop: 59958, Start Num: 2

Candidate Starts for Pureglobe5_100:

(Start: 2 @60869 has 13 MA's), (7, 60800), (8, 60794), (10, 60746), (11, 60743), (12, 60737), (17, 60698), (22, 60629), (25, 60620), (26, 60605), (27, 60596), (28, 60578), (29, 60560), (30, 60557), (36, 60482), (38, 60449), (40, 60440), (43, 60410), (54, 60269), (55, 60263), (56, 60251), (57, 60227), (59, 60221), (61, 60179), (69, 60107), (70, 60104), (71, 60101), (74, 60071),

Gene: RIPWilbur_99 Start: 60180, Stop: 59269, Start Num: 2

Candidate Starts for RIPWilbur_99:

(Start: 2 @60180 has 13 MA's), (7, 60111), (8, 60105), (10, 60057), (11, 60054), (12, 60048), (17, 60009), (18, 59988), (22, 59940), (26, 59916), (27, 59907), (28, 59889), (29, 59871), (30, 59868), (36, 59793), (40, 59751), (43, 59721), (46, 59667), (54, 59580), (55, 59574), (56, 59562), (57, 59538), (59, 59532), (61, 59490), (69, 59418), (70, 59415), (71, 59412), (74, 59382),

Gene: Ranunculus_89 Start: 61174, Stop: 60257, Start Num: 2

Candidate Starts for Ranunculus_89:

(Start: 2 @61174 has 13 MA's), (5, 61132), (7, 61102), (8, 61096), (12, 61045), (15, 61030), (18, 60985), (20, 60970), (22, 60937), (24, 60934), (28, 60886), (29, 60868), (32, 60835), (34, 60805), (39, 60751), (40, 60748), (46, 60664), (56, 60559), (57, 60535), (60, 60499), (64, 60445), (77, 60352), (79, 60319), (80, 60316),

Gene: RazzB_99 Start: 59741, Stop: 58830, Start Num: 2

Candidate Starts for RazzB_99:

(Start: 2 @59741 has 13 MA's), (7, 59672), (8, 59666), (10, 59618), (11, 59615), (12, 59609), (17, 59570), (18, 59549), (22, 59501), (26, 59477), (27, 59468), (28, 59450), (29, 59432), (30, 59429), (36,

59354), (40, 59312), (43, 59282), (46, 59228), (54, 59141), (55, 59135), (56, 59123), (57, 59099), (59, 59093), (61, 59051), (69, 58979), (70, 58976), (71, 58973), (74, 58943),

Gene: Ren19_92 Start: 59356, Stop: 58430, Start Num: 2

Candidate Starts for Ren19_92:

(Start: 2 @59356 has 13 MA's), (4, 59335), (7, 59287), (8, 59281), (11, 59230), (15, 59209), (18, 59164), (22, 59116), (24, 59113), (29, 59038), (34, 58975), (35, 58963), (36, 58960), (37, 58948), (38, 58927), (43, 58888), (46, 58834), (55, 58741), (57, 58705), (58, 58702), (61, 58657), (65, 58606), (68, 58591), (70, 58576), (72, 58558), (74, 58543),

Gene: Rizwana_75 Start: 54273, Stop: 53395, Start Num: 3

Candidate Starts for Rizwana_75:

(Start: 3 @54273 has 3 MA's), (7, 54198), (9, 54186), (13, 54132), (21, 54033), (28, 53979), (33, 53916), (41, 53853), (42, 53832), (44, 53811), (45, 53802), (47, 53757), (48, 53754), (52, 53703), (62, 53598), (63, 53586), (66, 53562), (67, 53556), (78, 53478),

Gene: Tank_76 Start: 54909, Stop: 54031, Start Num: 3

Candidate Starts for Tank_76:

(1, 54972), (Start: 3 @54909 has 3 MA's), (6, 54849), (9, 54822), (14, 54768), (18, 54720), (23, 54669), (31, 54582), (33, 54549), (41, 54486), (42, 54465), (44, 54444), (47, 54390), (49, 54375), (50, 54363), (51, 54351), (53, 54324), (63, 54219), (66, 54195), (67, 54189), (72, 54162), (75, 54138), (76, 54135),

Gene: Wilde_78 Start: 55253, Stop: 54372, Start Num: 3

Candidate Starts for Wilde_78:

(1, 55316), (Start: 3 @55253 has 3 MA's), (6, 55193), (9, 55166), (14, 55112), (18, 55064), (23, 55013), (31, 54926), (33, 54893), (41, 54830), (42, 54809), (44, 54788), (47, 54734), (49, 54719), (51, 54695), (53, 54668), (57, 54632), (67, 54533), (70, 54518), (73, 54494),